

WHAT IS CLAIMED IS:

1. A method of applying a splicing tape to a roll of sheet material, the method comprising:
 - lifting a portion of an outer-most layer away from a remainder of the roll to form a lifted portion of the outer-most layer;
 - applying the splicing tape to a wound portion of the roll; and
 - applying pressure to the lifted portion of the outer-most layer to progressively place the lifted portion of the outer-most layer in contact with the remainder of the roll and the splicing tape.
2. The method of claim 1, wherein the lifting step includes lifting the portion of the outer-most layer away from the remainder of the roll with a sheet engagement mechanism, and wherein the step of applying pressure to the lifted portion includes applying pressure to disengage the lifted portion from the sheet engagement mechanism.
3. The method of claim 2, wherein the sheet engagement mechanism includes a vacuum source for lifting the portion of the outer-most layer away from the remainder of the roll.
4. The method of claim 1, wherein the applying pressure step includes applying pressure with a paper applicator to the lifted portion of the outer-most layer to progressively place the lifted portion of the outer-most layer in contact the remainder of the roll and the splicing tape.
5. The method of claim 4, wherein the paper applicator includes a roller, and wherein the applying pressure step includes progressively pressing the roller along the outer-most layer and the splicing tape.

6. The method of claim 1, further comprising:

cutting the lifted portion of the outer-most layer to form a leading edge of the roll, wherein the applying pressure step includes applying pressure to the lifted portion of the outer-most layer to apply the leading edge of the roll to the splicing tape.

7. The method of claim 1, wherein the splicing tape has a first section and a second section, wherein the outer-most layer covers the first section of the splicing tape and the second section of the splicing tape remains exposed adjacent the outer-most layer.

8. The method of claim 1, further comprising:

holding down a portion of the outer-most layer as the lifted portion of the outer-most layer is lifted away from the remainder of the roll.

9. An apparatus for applying a splicing tape to a roll of sheet material, the apparatus comprising:

a sheet engagement mechanism to lift an outer-most layer of the roll to form a lifted portion of the outer-most layer;
a taping device to apply a splicing tape to the roll; and
a paper applicator to apply pressure to the lifted portion of the outer-most layer to progressively place the lifted portion of the outer-most layer in contact with the remainder of the roll and the splicing tape.

10. The apparatus of claim 9, wherein the paper applicator applies pressure to disengage the lifted portion from the sheet engagement mechanism.

11. The apparatus of claim 9, wherein the paper applicator includes a roller for rolling along the lifted portion of the outer-most layer to disengage the lifted portion of the outer-most layer from the sheet engagement mechanism and to progressively press the roller along the outer-most layer and the splicing tape.

12. The apparatus of claim 9, further comprising:
a sheet cutter to cut the outer-most layer of the roll across a width thereof.
13. The apparatus of claim 9, wherein the sheet engagement mechanism includes a vacuum source for lifting the portion of the outer-most layer away from the remainder of the roll.
14. The apparatus of claim 9, wherein the paper applicator holds down a portion of the outer-most layer as the lifted portion of the outer-most layer is lifted away from the remainder of the roll by the sheet engagement mechanism.
15. The apparatus of claim 9, wherein the splicing tape has a first section and a second section, wherein the outer-most layer covers the first section of the splicing tape and the second section of the splicing tape remains exposed adjacent the outer-most layer.
16. The apparatus of claim 9, wherein the taping device further includes a press down roller for pressing the outer-most layer against an outer surface of splicing tape after the paper applicator applies the lifted portion of the outer-most layer to the splicing tape.
17. An apparatus for engaging a roll of sheet material, the apparatus comprising:
a plurality of sheet engagement mechanisms to engage and lift an outer-most layer of the roll to form a lifted portion of the outer-most layer, wherein each sheet engagement mechanism includes a vacuum source and a roll sensor for sensing a spatial position of the roll relative to the sheet material engagement mechanism, wherein each vacuum source only operates when a selected plurality of the roll sensors sense the roll relative to the sheet engagement mechanism.

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18. The apparatus of claim 17, wherein each vacuum source includes a plurality of vacuum cups.